

AMENDMENTS TO THE CLAIMS

Listing of Claims:

1. (Currently amended) An isolated nucleic acid comprising a nucleotide sequence encoding a polypeptide which has a D-amino acid metabolizing activity, wherein the nucleotide sequence is operably linked to a heterologous plant specific regulatory element, which directs expression of the nucleic acid within a plant cell.
2. (Previously presented) The nucleic acid of claim 1, wherein the D-amino acid metabolizing activity is selected from the group consisting of oxidase, racemase, carboxylase, transaminase and dehydratase activity.
3. (Previously presented) The nucleic acid of claim 2, wherein the polypeptide is identified in Table 1 or Table 2.
4. (Previously presented) The nucleic acid of claim 1, wherein a substrate for the D-amino acid metabolizing activity is selected from the group consisting of D-ser, D-ala, D-glu, D-arg, D-lys, D-his, D-asp, D-asn, D-gln and combinations thereof.
5. (Previously presented) The nucleic acid of claim 1, further comprising a nucleotide sequence encoding a heterologous polypeptide.
6. (Previously presented) The nucleic acid of claim 1, wherein said polypeptide comprises a transit peptide that directs accumulation of said polypeptide to an intracellular compartment of a plant cell.
7. (Previously presented) An expression vector comprising the nucleic acid of claim 1.
8. (Previously presented) A plant cell comprising the expression vector of claim 7.
9. (Previously presented) A plant comprising the plant cell of claim 8.

10. (Previously presented) The plant of claim 9, which is a monocotyledon, dicotyledon, gymnosperm, algae, fern or moss.
11. (Previously presented) A method of producing a transgenic plant comprising:
transforming a plant cell with the expression vector of claim 7; and
producing the transgenic plant from said transformed plant cell on a medium.
12. (Currently amended) The method of claim 11, wherein the medium comprises a single nitrogen source, said nitrogen source consisting of a D-amino acid.
13. (Withdrawn) A fertilizer composition for selective fertilization of the plant of claim 9; said fertilizer comprising a D-amino acid.
14. (Withdrawn) A composition having herbicide activity and comprising one or more D-amino acids.
15. (Withdrawn) A method of controlling plant growth comprising treating a plant with the composition of claim 13.
16. (Withdrawn) A method of stimulating stress tolerance of a plant comprising:
expressing in said plant a polypeptide which oxidizes a D-amino acid substrate;
and
treating said plant with said D-amino acid substrate.
17. (Withdrawn) A method of inhibiting growth of a transgenic plant that expresses a polypeptide which oxidizes a D-amino acid substrate, the method comprising:
allowing the polypeptide to accumulate in cytosol of the plant; and
treating the plant with the D-amino acid substrate.

18. (Withdrawn) The method of claim 17, wherein the D-amino acid substrate is D-ile or D-asn.
19. (Withdrawn) A method for selective growth of plant cells that have a D-amino acid metabolizing activity comprising treating said plant cells with a fertilizer that contains D-amino acid.
20. (Cancelled)
21. (Previously presented) The plant of claim 9, which is selected from the group consisting of tobacco, cucurbits, carrot, vegetable brassica, melons, capsicums, grape vines, lettuce, strawberry, oilseed brassica, sugar beet, wheat, barley, maize, rice, soyabeans, peas, sorghum, sunflower, tomato, potato, pepper, chrysanthemum, carnation, poplar, eucalyptus, cotton, linseed, hemp, spruce, birch, peanuts, rye and pine.
22. (Previously presented) The method of claim 11, wherein the nucleic acid is stably incorporated into the genome of said plant cell.
23. (Currently amended) The method of claim 11, wherein the medium comprises a nitrogen source that is toxic to ~~plants that do~~ a wild-type plant that does not express said polypeptide.
24. (Previously presented) The method of claim 23, wherein the nitrogen source comprises one or more D-amino acids.
25. (Previously presented) The method of claim 12, wherein the single nitrogen source comprises one or more D-amino acids.
26. (Withdrawn) The method of claim 15, wherein the composition contains from 0.1 mM to 50 mM of said D-amino acids.

27. (Withdrawn) The method of claim 15, wherein the composition contains from 0.1% (w/w) to 30% w/w of said D-amino acids.
28. (Withdrawn) The method of claim 19, wherein the D-amino acids are a primary nitrogen source of the fertilizer.
29. (Withdrawn) The method of claim 19, wherein, before treating, the plant cells are transformed with a nucleotide sequence encoding a polypeptide that possesses a D-amino acid metabolizing activity.
30. (Currently amended) The nucleic acid of claim 2 wherein the ~~polypeptide has the amino acid sequence identified in GenBank Accession No.: P80324~~ nucleotide sequence comprises SEQ ID NO: 5.
31. (Previously presented) A plant cell comprising the nucleic acid of claim 1.
32. (Previously presented) A plant comprising the plant cell of claim 31.
33. (Previously presented) The plant of claim 32 which is a monocotyledon, dicotyledon, gymnosperm, algae, fern or moss.
34. (Withdrawn) A fertilizer composition for selective fertilization of the plant of claim 32; said fertilizer comprising a D-amino acid.
35. (Withdrawn) A method of controlling plant growth comprising treating a plant with the composition of claim 34.
36. (Previously presented) The plant of claim 32, which is selected from the group consisting of tobacco, cucurbits, carrot, vegetable brassica, melons, capsicums, grape vines, lettuce, strawberry, oilseed brassica, sugar beet, wheat, barley, maize, rice, soyabeans, peas,

sorghum, sunflower, tomato, potato, pepper, chrysanthemum, carnation, poplar, eucalyptus, cotton, linseed, hemp, spruce, birch, peanuts, rye and pine.

37. (Withdrawn) The method of claim 35, wherein the composition contains from 0.1 mM to 50 mM of said D-amino acids.

38. (Withdrawn) The method of claim 35, wherein the composition contains from 0.1% (w/w) to 30% w/w of said D-amino acids.